

Applicants believe Groups A-H, U-Z, AA and BB for the second restriction requirement, and Groups i-iv for the third restriction requirement should be examined together, and request that the Examiner consider the following remarks and modify the restriction requirement.

Even if the Examiner is not persuaded to examine Groups A-H, U-Z, AA and BB together, Applicants submit that Group Z (pertaining to SEQ ID NO: 37) must be examined with provisionally elected Group Y (pertaining to SEQ ID NO: 36), because the amino acid sequence set forth in SEQ ID NO: 37 (Group Y) is encoded by the nucleic acid sequence set forth in SEQ ID NO: 36 (Group Z). In accordance with Applicants' election of Group I, claims drawn to proteins and nucleic acid molecules will be examined together.

Please enter the following amendments in this application:

**In the Specification:**

Please replace the paragraph at page 9, lines 9-10 with the following:

B<sup>1</sup>

SEQ ID NO: 36 shows the nucleic acid and deduced protein sequence of the precursor porcine active N+5HA TGF- $\beta$ 1 (actN5HAb1) fusion.

Please replace the paragraph at page 9, lines 13-14 with the following:

B<sup>2</sup>

SEQ ID NO: 38 shows the nucleic acid and deduced protein sequence of the precursor porcine latent N+5HA TGF- $\beta$ 1 (latN5HAb1) fusion.

Please replace the paragraph at page 28, line 24 through page 29, line 12 with the following:

B<sup>3</sup>

In other examples of fusion proteins in which the functionalizing peptide is inserted within the mature TGF- $\beta$  family protein, a portion of the TGF- $\beta$  family protein may be repeated both before and after the inserted peptide. For instance, in some specific examples, the peptide is inserted after five amino acid residues of the mature TGF- $\beta$  family protein, and these five amino acids are then repeated after the peptide (such that the entire TGF- $\beta$  mature protein occurs in the fusion after the peptide). Such a fusion protein is exemplified by N+5FLAG-TGF- $\beta$ 1 (SEQ ID

$\beta^3$   
NOs: 16 & 17); N+5HA-TGF- $\beta$ 1 (SEQ ID NOs: 20 & 21); N+5FLAG TGF- $\beta$ 2 (SEQ ID NOs: 24 & 25); N+5HA TGF- $\beta$ 2 (SEQ ID NOs: 26 & 27); N+5FLAG TGF- $\beta$ 3 (SEQ ID NOs: 28 & 29); N+5HA TGF- $\beta$ 3 (SEQ ID NOs: 30 & 31); N+5FLAG TGF- $\beta$ 1 (SEQ ID NOs: 32 & 33); N+5FLAG-TGF- $\beta$ 1 (SEQ ID NOs: 34 & 35); N+5HA TGF- $\beta$ 1 (SEQ ID NOs: 36 & 37); and N+5HA TGF- $\beta$ 1 (SEQ ID NOs: 38 & 39). Though these illustrated fusions have the peptide inserted after five amino acids of the mature TGF- $\beta$  family protein, it could be inserted after a different number of amino acids, for instance, after one, after two, after three, after four, after six, after seven, or after eight amino acids. In this particular class of constructs, the amino acid residues of the mature TGF- $\beta$  family protein that are located before (amino-terminal to) the functionalizing peptide are usually also repeated after the peptide, though they need not all be repeated.

---

*Please replace the paragraph at page 69, lines 5-18 with the following:*

---

Additional functionalized TGF- $\beta$  fusion proteins have been constructed in a manner essentially similar to the methods described in Examples 3 and 4. Specific examples of additional functionalized fusions include:

$\beta^4$   
murine N+5FLAG TGF- $\beta$ 2 (MN5FLAGb2; SEQ ID NO: 24 and 25);  
murine N+5HA TGF- $\beta$ 2 (MN5HAb2; SEQ ID NO: 26 and 27);  
murine N+5FLAG TGF- $\beta$ 3 (MN5FLAGb3; SEQ ID NO: 28 and 29);  
murine N+5HA TGF- $\beta$ 3 (MN5HAb3; SEQ ID NO: 30 and 31);  
porcine active N+5FLAG TGF- $\beta$ 1 (actN5FLAGb1; SEQ ID NO: 32 and 33);  
porcine latent N+5FLAG TGF- $\beta$ 1 (latN5FLAGb1; SEQ ID NO: 34 and 35) (made latent by mutations at positions 682 and 688 of SEQ ID NO: 34);  
porcine active N+5HA TGF- $\beta$ 1 (actN5HAb1; SEQ ID NO: 36 and 37); and  
porcine latent N+5HA TGF- $\beta$ 1 (latN5HAb1; SEQ ID NO: 38 and 39) (made latent by mutations at positions 678 and 684 of SEQ ID NO: 38).

---